

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:sssptal649axm

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * Welcome to STN International * * * * *

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America
NEWS 2 Jan 25 BLAST(R) searching in REGISTRY available in STN on the Web
NEWS 3 Jan 29 FSTA has been reloaded and moves to weekly updates
NEWS 4 Feb 01 DKILIT now produced by FIZ Karlsruhe and has a new update frequency
NEWS 5 Feb 19 Access via Tymnet and SprintNet Eliminated Effective 3/31/02
NEWS 6 Mar 08 Gene Names now available in BIOSIS
NEWS 7 Mar 22 TOXLIT no longer available
NEWS 8 Mar 22 TRCTHERMO no longer available
NEWS 9 Mar 28 US Provisional Priorities searched with P in CA/Caplus and USPATFULL
NEWS 10 Mar 28 LIPINSKI/CALC added for property searching in REGISTRY
NEWS 11 Apr 02 PAPERCHEM no longer available on STN. Use PAPERCHEM2 instead.
NEWS 12 Apr 08 "Ask CAS" for self-help around the clock
NEWS 13 Apr 09 BEILSTEIN: Reload and Implementation of a New Subject Area
NEWS 14 Apr 09 ZDB will be removed from STN
NEWS 15 Apr 19 US Patent Applications available in IFICDB, IFIPAT, and IFIUDB
NEWS 16 Apr 22 Records from IP.com available in CAPLUS, HCAPLUS, and ZCAPLUS
NEWS 17 Apr 22 BIOSIS Gene Names now available in TOXCENTER
NEWS 18 Apr 22 Federal Research in Progress (FEDRIP) now available
NEWS 19 Jun 03 New e-mail delivery for search results now available
NEWS 20 Jun 10 MEDLINE Reload
NEWS 21 Jun 10 PCTFULL has been reloaded
NEWS 22 Jul 02 FOREGE no longer contains STANDARDS file segment
NEWS 23 Jul 19 NTIS to be reloaded July 28, 2002
NEWS 24 Jul 22 USAN to be reloaded July 28, 2002; saved answer sets no longer valid

NEWS EXPRESS February 1 CURRENT WINDOWS VERSION IS V6.0d, CURRENT MACINTOSH VERSION IS V6.0a(ENG) AND V6.0Ja(JP), AND CURRENT DISCOVER FILE IS DATED 05 FEBRUARY 2002
NEWS HOURS STN Operating Hours Plus Help Desk Availability
NEWS INTER General Internet Information
NEWS LOGIN Welcome Banner and News Items
NEWS PHONE Direct Dial and Telecommunication Network Access to STN
NEWS WWW CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 13:44:06 ON 25 JUL 2002

=> file agricola biosis
COST IN U.S. DOLLARS

| SINCE FILE | TOTAL |
|------------|---------|
| ENTRY | SESSION |
| 0.21 | 0.21 |

FULL ESTIMATED COST

FILE 'AGRICOLA' ENTERED AT 13:44:14 ON 25 JUL 2002

FILE 'BIOSIS' ENTERED AT 13:44:14 ON 25 JUL 2002
COPYRIGHT (C) 2002 BIOLOGICAL ABSTRACTS INC.(R)

=> s anther color (10w) yellow
L1 2 ANTER COLOR (10W) YELLOW

=> s l1 and (maize or corn)
L2 0 L1 AND (MAIZE OR CORN)

=> s glume color (10w) pink
L3 0 GLUME COLOR (10W) PINK

=> s silk color (10w) pink
L4 0 SILK COLOR (10W) PINK

=> s ph6me and (corn or maize)
L5 0 PH6ME AND (CORN OR MAIZE)

=> s relative maturiy (10w) 109
L6 0 RELATIVE MATURIY (10W) 109

=> s excellent grain yield
L7 7 EXCELLENT GRAIN YIELD

=> s l7 and (corn or maize)
L8 2 L7 AND (CORN OR MAIZE)

=> d 1-2 ti

L8 ANSWER 1 OF 2 AGRICOLA
TI Field chlorophyll measurements for evaluation of **corn** nitrogen status.

L8 ANSWER 2 OF 2 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI FIELD CHLOROPHYLL MEASUREMENTS FOR EVALUATION OF **CORN** NITROGEN STATUS.

=> d 1-2 ab

L8 ANSWER 1 OF 2 AGRICOLA
AB An experiment was conducted on Norfolk sandy loam soil (Fine-loamy, siliceous, thermic Typic Kandiodults) during two years to determine the feasibility of using field chlorophyll measurements for evaluation of **corn** (Zea mays L.) N status. Nitrogen was applied at rates of 56, 112, 168, 224, 290 and 336 kg ha⁻¹ to establish a range of **corn** chlorophyll levels, tissue N concentrations, and grain yields. At the V10 and mid silk stages of growth, field chlorophyll measurements were taken with a hand-held chlorophyll meter (SPAD-502 Chlorophyll Meter, Minolta Camera Co., Ltd., Japan) and tissue N was determined. A typical curvilinear grain yield response to N fertilizer was observed both years; maximum agronomic yields were obtained with 227 and 242 kg N ha⁻¹, respectively, in 1990 and 1991. Tissue N concentrations at V10 and mid silk

were a good predictor of grain yield. Field chlorophyll measurements were highly correlated with tissue N concentrations at both growth stages during both years of the study. Field chlorophyll measurements had **excellent grain yield** prediction capabilities, even at V10, which shows promise for utilization of this tool for in-season N recommendations. However, further calibration of field chlorophyll measurements will be required prior to routine use for **corn** N recommendation purposes.

L8 ANSWER 2 OF 2 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
AB An experiment was conducted on Norfolk sandy loam soil (Fine-loamy, siliceous, thermic Typic Kandiodults) during two years to determine the feasibility of using field chlorophyll measurements for evaluation of **corn** (Zea mays L.) N status. Nitrogen was applied at rates of 56, 112, 168, 224, 280 and 336 kg ha⁻¹ to establish a range of **corn** chlorophyll levels, tissue N concentrations, and grain yields. At the V10 and mid silk stages of growth, field chlorophyll measurements were taken with a hand-held chlorophyll meter (SPAD-502 Chlorophyll Meter, Minolta Camera Co., Ltd, Japan)³ and tissue N was determined. A typical curvilinear grain yield response to N fertilizer was observed both years; maximum agronomic yields were obtained with 227 and 242 kg N ha⁻¹, respectively, in 1990 and 1991. Tissue N concentrations at V10 and mid silk were a good predictor of grain yield. Field chlorophyll measurements were highly correlated with tissue N concentrations at both growth stages during both years of the study. Field chlorophyll measurements had **excellent grain yield** prediction capabilities, even at V10, which shows promise for utilization of this tool for in-season N recommendations. However, further calibration of field chlorophyll measurements will be required prior to routine use for **corn** N recommendation purposes.

=> d 1-2 so

L8 ANSWER 1 OF 2 AGRICOLA
SO Journal of plant nutrition, 1992. Vol. 15, No. 4. p. 487-500
Publisher: New York, N.Y. : Marcel Dekker.
CODEN: JPNUDS; ISSN: 0190-4167

L8 ANSWER 2 OF 2 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
SO J PLANT NUTR, (1992) 15 (4), 487-500.
CODEN: JPNUDS. ISSN: 0190-4167.

=> s fusarium and (resist? or tolera?)
L9 5816 FUSARIUM AND (RESIST? OR TOLERA?)

=> s l9 and (corn or maize)
L10 391 L9 AND (CORN OR MAIZE)

=> s l10 and excellent
L11 3 L10 AND EXCELLENT

=> d 1-3

L11 ANSWER 1 OF 3 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
AN 2001:333228 BIOSIS
DN PREV200100333228
TI CO430, CO431 and CO432 **corn** inbred lines.
AU Reid, L. M. (1); McDiarmid, G. (1); Parker, A. J. (1); Woldemariam, T. (1); Hamilton, R. I. (1)
CS (1) Eastern Cereal and Oilseed Research Centre, Central Experimental Farm, Agriculture and Agri-Food Canada, Ottawa, ON, K1A 0C6 Canada
SO Canadian Journal of Plant Science, (April, 2001) Vol. 81, No. 2, pp.

283-284. print.
ISSN: 0008-4220.

DT Article
LA English
SL English; French

L11 ANSWER 2 OF 3 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
AN 1992:308459 BIOSIS
DN BA94:21609
TI SURVEY OF STUDIES ON **MAIZE RESISTANCE** TO STALK AND EAR
ROT PATHOGENS IN YUGOSLAVIA.
AU DRAGANIC M; BORIC B
CS INST. PLANT PROTECTION ENVIRON., BELGRADE.
SO ZAST BILJA, (1991) 42 (3), 173-182.
CODEN: ZABIAY. ISSN: 0372-7866.
FS BA; OLD
LA English

L11 ANSWER 3 OF 3 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
AN 1981:285971 BIOSIS
DN BA72:70955
TI LODGING **RESISTANT** DISEASE **RESISTANT** AND INSECT
RESISTANT HIGH YIELDING **MAIZE** ZEA-MAYS U HYBRID
SUWEON-21.
AU KIM S K; PARK K Y; KIM S D; MOON H G; PARK S U; CHOI H O; HAM Y S;
BREWBAKER J L
CS CROP EXPERIMENT STATION, ORD., SUWEON, KOREA.
SO RES REP OFF RURAL DEV (SUWON), (1978 (RECD 1979)) 20 (CROP), 163-168.
CODEN: NSYPAS. ISSN: 0075-6865.
FS BA; OLD
LA Korean

=> d 1-3 ab

L11 ANSWER 1 OF 3 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
AB CO430, CO431 and CO432 are short-season **corn** inbred lines with
improved **resistance** to silk infection by **Fusarium**
graminearum. These inbreds exhibit average combining ability, average to
superior lodging **resistance** in hybrids and were rated as having
excellent emergence and seedling vigour.

L11 ANSWER 2 OF 3 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
AB During the last decade, due to breeding and growing of the high yielding
maize hybrids, **excellent** results were achieved in
increasing **maize** yields. However, numerous factors considerably
impede better use of the genetic potential and yielding capacity of
developed hybrids. Diseases and pests, in addition to climatic factors,
are the most common factors of reductions in yield. Damages caused by the
stalk and ear rot depend on the genotype of the host, i.e. the
maize hybrid, the pathogenicity of different causal organisms of
these diseases, as well as, on agroecologic conditions. The most common
pathogens of these diseases are fungi of the **Fusarium** genus. Of
lesser importance are *Sclerotium bataticola* Taub., *Nigrosporea oryzae*
(Berk. et Br.) Petch., *Helminthosporium* spp., *Curvularia* spp.,
Colletotrichum spp., *Pythium* spp., and others, while bacteria occur more
rarely and are commonly found in seed crops and irrigation conditions.
Diseases of stalk and ear rot type are significant for the production of
maize, because they reduce yields and deteriorate kernel quality.
According to more recent works, regardless of various difficulties due to
the existence of a greater number of pathogens, even isolates of different
aggressivity within one species, it is possible through breeding to develop
more **resistant** and higher yielding **maize** hybrids
having a horizontal (general) **resistance**. The inheritance of

resistance to rot pathogens is of a polygenic nature, making the development of **resistant** hybrids even more difficult.

L11 ANSWER 3 OF 3 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.

AB A new high yielding **maize** cultivar, Suweon 21, was developed by the cross of 2 parental inbred lines, KS 5 (seed parent) and KS 8 (pollen parent) at the Crop Experiment Station, Office of Rural Development in cooperation with the University of Hawaii, USA. 'Suweon 21' hybrid has good **resistant** genes to *Helminthosporium turcicum*, *H. maydis*, **Fusarium** rot and to European **corn** borer. This hybrid has **excellent** lodging **resistant** genes. Yield increases of this hybrid compared to recently released synthetic 'Hwangok 3' were 39% higher at 6 different regional experimental locations and 97% higher in 26 ha of hybrid demonstration farmer's field compared to widely grown synthetic 'Hwangok 2', respectively. This hybrid is recommended to be grown mainly in the central north-eastern **corn** belt areas.

=> s gray leaf spot and (corn or maize)

L12 129 GRAY LEAF SPOT AND (CORN OR MAIZE)

=> s l12 and (resist? or tolera?)

L13 70 L12 AND (RESIST? OR TOLERA?)

=> s l13 and above average

L14 1 L13 AND ABOVE AVERAGE

=> d ti

L14 ANSWER 1 OF 1 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.

TI Evaluation of Iowa stiff stalk synthetic for **resistance** to **gray leaf spot**.

=> d ab

L14 ANSWER 1 OF 1 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.

AB **Gray leaf spot** (GLS) of **maize** (*Zea mays*), caused by *Cercospora zeae-maydis*, has become an increasing disease problem in the United States. **Resistance** to this pathogen is generally higher in inbred lines of Lancaster origin compared to lines derived from Iowa Stiff Stalk Synthetic (BSSS). This study was conducted to determine whether recurrent selection for yield had altered the level of GLS **resistance** in BSSS and to identify BSSS(R)C11 S-1 lines that combine GLS **resistance** with high yield. The distribution of GLS ratings for S-1 lines derived from BSSSC0 and BSSS(R)C11 were very similar, indicating that selection for yield had not altered GLS **resistance** levels. Although the mean rating for both cycles was a susceptible 7 (1=**resistant**, 9=susceptible), S-1 lines with intermediate levels of **resistance** (4-6) were identified. The 250 BSSS(R)C11 S-1 lines were crossed to LH51, and the testcrosses were evaluated for yield and agronomic performance. S-1 lines were identified which combine intermediate levels of GLS **resistance** with the **above-average** standability and yield. These S-1 lines will be recombined to develop an Iowa Stiff Stalk Synthetic population adapted to eastern **maize** growing conditions.

=> d so

L14 ANSWER 1 OF 1 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.

SO Plant Disease, (1993) Vol. 77, No. 4, pp. 382-385.
ISSN: 0191-2917.

=> s northern leaf blight and (corn or maize)
L15 138 NORTHERN LEAF BLIGHT AND (CORN OR MAIZE)

=> s l15 and (resist? or tolera?)
L16 86 L15 AND (RESIST? OR TOLERA?)

=> s l16 and above average
L17 0 L16 AND ABOVE AVERAGE

=> s brittle stalk and (corn or maize)
L18 0 BRITTLE STALK AND (CORN OR MAIZE)

WEST Search History

DATE: Thursday, July 25, 2002

Set Name Query
side by side**Hit Count Set Name**
result set*DB=USPT; PLUR=YES; OP=ADJ*

| | | | |
|-----|----------------------------------|-----|-----|
| L15 | excellent grain yield | 6 | L15 |
| L14 | relative maturity adj5 109 | 6 | L14 |
| L13 | L12 and excellent grain yield | 1 | L13 |
| L12 | above average adj5 brittle stalk | 67 | L12 |
| L11 | above average adj5 northern leaf | 9 | L11 |
| L10 | L9 and (corn or maize) | 8 | L10 |
| L9 | excellent adj5 fusarium | 17 | L9 |
| L8 | ph6me and (corn or maize) | 0 | L8 |
| L7 | l2 and l4 and l6 | 1 | L7 |
| L6 | L5 and (corn or maize) | 82 | L6 |
| L5 | anther color adj5 yellow | 141 | L5 |
| L4 | L3 and (corn or maize) | 225 | L4 |
| L3 | cob color adj5 red | 225 | L3 |
| L2 | L1 and (corn or maize) | 1 | L2 |
| L1 | glume color adj5 pink | 1 | L1 |

END OF SEARCH HISTORY